

IN THE CLAIMS:

Claims 1, 6, 10, 21, 25 and 30 have been amended herein. All of the pending claims 1 through 40 are presented below. This listing of claims will replace all prior versions and listings of claims in the application. Please enter these claims as amended.

Listing of Claims:

1. (Currently amended) A method of assembling a semiconductor device and a lead frame, the lead frame having a plurality of lead fingers in strip form, each lead finger of the plurality of lead fingers having a bonding end, the plurality of lead fingers forming an opening for a semiconductor device, the lead frame having no die paddle for supporting the semiconductor device thereon, comprising:
attaching a segment of tape to portions of the lead frame, the segment of tape extending across the opening having adhesive located thereon forming attachment locations for the semiconductor device and for portions of the plurality of lead fingers ~~of a~~ of the lead frame, the segment of tape having an aperture therein for compensating for expansion and contraction of the segment of tape;
attaching portions of lead fingers of the plurality of lead fingers to a portion of the segment of tape; and
attaching the semiconductor device to at least a portion of the segment of tape at the attachment location for the semiconductor device using the ~~thermosetting~~-adhesive located on a portion of the segment of tape, the semiconductor device having a portion thereof located within the opening formed by the plurality of lead fingers of the lead frame.
2. (Previously presented) The method of claim 1, further including:
forming another aperture in the segment of tape.

3. (Original) The method of claim 1, further including:
forming a plurality of apertures in the segment of tape.

4. (Original) The method of claim 3, wherein the plurality of apertures substantially
forms a grid-like pattern of apertures.

5. (Previously presented) The method of claim 2, wherein the semiconductor device
is attached to the segment of tape such that at least a portion of an outer periphery of the
semiconductor device is adjacent to a portion of a periphery of the at least one aperture.

6. (Currently amended) The method of claim 3, wherein the semiconductor device is
attached to the segment of tape such that at least a portion of an outer periphery ~~of the~~ of an
attachment surface of the semiconductor device is positioned within at least one aperture of the
plurality of apertures.

7. (Original) The method of claim 1, further including:
wire bonding contacts of the semiconductor device to the bonding ends of the plurality of lead
fingers.

8. (Original) The method of claim 1, further including:
packaging the semiconductor device in an encapsulating material to form a packaged
semiconductor device.

9. (Original) The method of claim 8, further comprising:
forming the segment of tape to fit within the encapsulating material.

10. (Currently amended) A method of assembling a semiconductor device and a lead frame, ~~said the~~ lead frame having a plurality of lead fingers, each lead finger of the plurality of lead fingers having an end forming an opening between the ends of the plurality of lead fingers of the lead frame having a size of at least ~~the~~ an attachment surface of the semiconductor device, comprising:

attaching at least two tape segments to portions of the lead frame, the at least two tape segments being spaced to define at least one opening between the at least two tape segments providing an attachment location for the semiconductor device therein and portions of the plurality of lead fingers of the lead frame thereto, ~~said the~~ at least two tape segments shaped for extending across the at least one opening forming the attachment surface of the semiconductor device, each segment of tape having at least one aperture therein to allow for the expansion and contraction thereof.

11. (Previously presented) The method of claim 10, further including forming a plurality of apertures in at least one tape segment of the at least two tape segments.

12. (Original) The method of claim 11, wherein the plurality of apertures substantially forms a grid-like pattern of apertures.

13. (Previously presented) The method of claim 11, further including:
attaching the semiconductor device to the at least one tape segment of the at least two tape segments having at least a portion of an outer periphery of the semiconductor device adjacent to a periphery of at least one aperture of the plurality of apertures.

14. (Previously presented) The method of claim 13, wherein the semiconductor device is attached to the at least one tape segment such that at least a portion of the outer periphery of the semiconductor device is positioned within the at least one aperture of the plurality of apertures.

15. (Original) The method of claim 13, further including:
wire bonding contacts of the semiconductor device to the ends of the plurality of lead fingers.
16. (Original) The method of claim 10, further including:
packaging the semiconductor device in an encapsulating material to form a packaged
semiconductor integrated circuit device.
17. (Previously presented) The method of claim 16, further comprising forming the at
least two tape segments to fit within the encapsulating material.
18. (Previously presented) The method of claim 10, wherein the at least two tape
segments comprises three or more tape segments.
19. (Previously presented) The method of claim 10, further including forming at least
one aperture in at least one tape segment of the at least two tape segments.
20. (Previously presented) The method of claim 10, wherein the adhesively attaching
the at least two tape segments to the portion of the ends of the plurality of lead fingers comprises
spacing the at least two tape segments to define at least two openings between the at least two
tape segments.

21. (Currently amended) An method for attaching a semiconductor device to a lead frame, the lead frame having a plurality of lead fingers, each lead finger having an end forming an opening for a semiconductor device to be mounted therein, comprising:
attaching a segment of tape to portions of the plurality of lead fingers of the lead frame, the segment of tape having a thermosetting adhesive located on a portion thereof for forming an attachment location for the semiconductor device thereon within the ends of the plurality of lead fingers, the segment of tape having an aperture therein for allowing movement of portions of the segment of tape; and
attaching the semiconductor device to at least a portion of the segment of tape at the attachment location for the semiconductor device, the semiconductor device being supported by the segment of tape.

22. (Previously presented) The method of claim 20, further including:
forming another aperture in the segment of tape.

23. (Previously presented) The method of claim 20, further including:
forming a plurality of apertures in the segment of tape.

24. (Previously presented) The method of claim 23, wherein the plurality of apertures substantially forms a grid-like pattern of apertures.

25. (Currently amended) The method of claim 22, wherein the semiconductor device is attached to the segment of tape such that at least a portion of an outer periphery of the semiconductor device is adjacent to a portion of a periphery of the ~~at least one~~ another aperture.

26. (Previously presented) The method of claim 23, wherein the semiconductor device is attached to the segment of tape such that at least a portion of an outer periphery of the attachment surface of the semiconductor device is positioned within at least one aperture of the plurality of apertures.

27. (Previously presented) The method of claim 20, further including:
wire bonding contacts of the semiconductor device to the plurality of lead fingers.

28. (Previously presented) The method of claim 20, further including:
packaging the semiconductor device in an encapsulating material to form a packaged semiconductor device.

29. (Previously presented) The method of claim 28, further comprising:
forming the segment of tape to fit within the encapsulating material.

30. (Currently amended) A method of attaching a semiconductor device to a lead frame, ~~said the~~ lead frame having a plurality of lead fingers, each lead finger having an end forming an opening between the ends of the plurality of lead fingers of the lead frame having a size of at least ~~the~~ an attachment surface of the semiconductor device, comprising:
attaching at least two tape segments to portions of the plurality of lead fingers of the lead frame, the at least two tape segments being spaced to define at least one opening between the at least two tape segments providing an attachment location for the semiconductor device therein, each segment of tape having at least one aperture therein to allow for movement of portions of the at least two ~~tape segment. segments.~~

31. (Previously presented) The method of claim 30, further including forming a plurality of apertures in at least one tape segment of the at least two tape segments.

32. (Previously presented) The method of claim 31, wherein the plurality of apertures substantially forms a grid-like pattern of apertures.

33. (Previously presented) The method of claim 31, further including:
attaching the semiconductor device to the at least one tape segment of the at least two tape segments having at least a portion of an outer periphery of the semiconductor device adjacent to a periphery of at least one aperture of the plurality of apertures.

34. (Previously presented) The method of claim 33, wherein the semiconductor device is attached to the at least one tape segment such that at least a portion of the outer periphery of the semiconductor device is positioned within the at least one aperture of the plurality of apertures.

35. (Previously presented) The method of claim 33, further including:
wire bonding contacts of the semiconductor device to the ends of the plurality of lead fingers.

36. (Previously presented) The method of claim 30, further including:
packaging the semiconductor device in an encapsulating material to form a packaged semiconductor integrated circuit device.

37. (Previously presented) The method of claim 36, further comprising forming the at least two tape segments to fit within the encapsulating material.

38. (Previously presented) The method of claim 30, wherein the at least two tape segments comprises three or more tape segments.

39. (Previously presented) The method of claim 30, further including forming at least one aperture in at least one tape segment of the at least two tape segments.

40. (Previously presented) The method of claim 30, wherein the adhesively attaching the at least two tape segments to the portion of the ends of the plurality of lead fingers comprises spacing the at least two tape segments to define at least two openings between the at least two tape segments.